

hypoglycemia were €0, €189 and €695 per event separately. **CONCLUSIONS:** Hypoglycemia is common acute side effect in treatment of T2DM patients, which associated with considerable health and economic burden to patients and their family.

PDB62

TYPE 2 DIABETES IN RUSSIA: PREVALENCE, RISK FACTORS, AND BURDEN

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OBJECTIVES: Although the prevalence of type 2 diabetes (T2D) is dramatically increasing worldwide, data on the prevalence, prevalence of those at risk, and the burden of these patients in Russia is lacking. **METHODS:** The data source for the current study was the 2011 Russia National Health and Wellness Survey (NHWS), a cross-sectional patient-reported health survey of adults in Russia (N=10,039). Respondents who reported a diagnosis of T2D were compared with non-T2D controls on health status (measured using the SF-12v2), work productivity (measured using the WPAI questionnaire), and number of resource use events using regression modeling controlling for sociodemographic and health history variables. Among respondents without a diagnosis of T2D, the prevalence and burden of key risk factors were reported. **RESULTS:** A total of 288 respondents in Russia reported a diagnosis of T2D (weighted prevalence: 2.77%). Among those not reporting a diagnosis, several risk factors were highly prevalent: 49.6% were overweight/obese, 17.5% had a family history of T2D, 34.5% currently smoke, 46.7% do not regularly exercise, and 20.2% have hypertension. Patients with T2D were older (57.9 vs. 44.3), had a lower annual income (19.1% vs. 11.2% had <12,000 RUR), were more likely to be obese (44.8% vs. 16.5%), and had a greater comorbidity burden (1.9 vs. 0.4) (all $p < .05$). Adjusting for group differences, patients with T2D reported significantly worse physical health status (physical component summary scores: 43.46 vs. 46.25, $p < .05$). No significant differences were observed on work productivity or health care resource use. **CONCLUSIONS:** The prevalence of T2D in Russia is modest but may represent a large undiagnosed population, especially because the non-T2D population reported a significant number of risk factors. The burden of T2D was primarily observed through health status. Together, these results underscore the importance of proper prevention and treatment of T2D.

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IMPROVEMENTS IN HEALTH-RELATED QUALITY OF LIFE IN ACROMEGALY WITH PASIREOTIDE LAR AND OCTREOTIDE LAR: RESULTS FROM A LARGE, RANDOMIZED, DOUBLE-BLIND PHASE III TRIAL

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OBJECTIVES: Patients with acromegaly have significantly impaired health-related quality of life (HRQOL). Results from a randomized, phase 3 study demonstrate superior biochemical control for pasireotide LAR, a novel multireceptor somatostatin analog, compared with octreotide LAR. The study also assessed patient-reported HRQOL. **METHODS:** Medically naïve (after pituitary surgery or de novo) patients with active acromegaly (GH level $\geq 5 \mu\text{g/L}$; elevated IGF-1) were randomized to receive pasireotide LAR 40mg (n=176) or octreotide LAR 20mg (n=182) injections once every 28 days for 12 months. Biochemical control was defined as GH < 2.5 $\mu\text{g/L}$ and normal IGF-1 at month 12. The AcroQoL questionnaire was used to assess HRQOL. A change in AcroQoL total score of >9.8 was considered meaningful based on a distribution-based estimate (1/2 standard deviation at baseline). This analysis was conducted on patients with baseline and month 12 data (N=275). **RESULTS:** HRQoL improved from baseline to month 12 with both pasireotide LAR (n=132; mean [SD] = 7.1 [14.7]) and octreotide LAR (n=143; 5.1 [15.6]). Mean scores were 58.5 and 55.9, respectively, at baseline and 65.3 and 61.5, respectively, at month 12 for pasireotide LAR and octreotide LAR. These scores are consistent with those previously reported for patients before and after effective treatment [56 [20]; 65 [18]]. Overall, 38.6% of pasireotide LAR patients met the AcroQoL criteria for a clinically meaningful change vs. 34.3% of octreotide LAR patients. This pattern was consistent for the AcroQoL physical and psychological subscales. For both treatments at baseline and month 12, HRQOL was better in patients who achieved biochemical control at month 12 (baseline: 62.9 [18.9] vs. 55.1 [19.5]); month 12: 66.9 [19.6] vs. 61.9 [22.0]). **CONCLUSIONS:** Pasireotide LAR treatment decreases GH and IGF-1 and improves HRQOL. 1Webb et al, 2007.

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THE AVOIDANCE OF WEIGHT GAIN IS IMPORTANT FOR ORAL TYPE 2 DIABETES TREATMENTS IN SWEDEN AND GERMANY: A PATIENT PREFERENCE STUDY

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OBJECTIVES: To quantify patient preferences for outcomes associated with oral type 2 diabetes mellitus (T2DM) treatments. **METHODS:** Adults in Sweden and Germany with a self-reported physician diagnosis of T2DM and currently receiving on oral anti-diabetic completed a web-enabled choice-format conjoint survey consisting of a series of 9 choices between pairs of hypothetical medication profiles. Each profile had different attributes within a pre-defined range, i.e., blood glucose control (A1c), number of monthly mild-to-moderate hypoglycemic events (hypos), one severe hypo per year (yes or no), weight gain per year, number of pills and frequency of administration, and monthly cost to the patient. Choice questions were based on an experimental design with known statistical properties. The survey was pretested with 25 patients using open-ended interviews. Bivariate probit

analysis was used to estimate probabilities for choosing how to take the medication based on patient characteristics and, conditional on that choice, preferences for treatment outcomes. **RESULTS:** A total of 188 respondents in Sweden and 195 in Germany completed the survey. Regarding the relative importance of the attributes over the ranges included in both countries, weight gain was the most important outcome followed by blood glucose control, for a once daily treatment. However, avoiding a 5-kg weight gain was 1.5 times more important in Sweden and 2.3 times more important in Germany than achieving moderate blood-glucose control. This implies that blood glucose control was relatively more important to Swedish patients than German patients. Avoiding one severe hypo per year was the third most important outcome in Sweden and fourth in Germany. In terms of the least important outcome, it was number of pills taken once a day in Sweden and number of monthly mild-to-moderate hypos in Germany. **CONCLUSIONS:** An oral T2DM treatment that has no associated weight gain would be most preferred in both Sweden and Germany.

PDB65

IMPAIRMENT OF WORK PRODUCTIVITY AND DAILY ACTIVITIES IN TURKISH PATIENTS WITH TYPE 2 DIABETES MELLITUS

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OBJECTIVES: An update of health economics analysis of type 2 diabetes mellitus (T2DM) in adult population in Turkey was performed. The objectives of the analysis were to determine the direct cost components caused by T2DM and its complications and also the loss of work productivity in T2DM. In this presentation, data on work productivity are reported. **METHODS:** Forty centres were selected from the list of centres in which adult T2DM patients were followed on a routine basis. These centres were representative of the country, since they were selected by two-stage cluster sampling. Data on work productivity were collected via "Work Productivity and Activity Impairment Questionnaire: General Health V2.0 (WPAI:GH)". **RESULTS:** A total of 657 patients' data were included in the analysis. The percentage of patients, who had a job, at the time of the study conducted, was 14.0%. This figure was lower in patients with ophthalmic complications (8.7% vs. 15.9%; $p=0.020$) and with cardiovascular complications (4.1% vs. 15.7%; $p=0.002$). Mean scores of absenteeism, presenteeism and overall work productivity loss were $23.5 \pm 37.6\%$, $15.2 \pm 18.8\%$, and $38.6 \pm 37.8\%$, respectively. Overall impairment score of work productivity was $22.7 \pm 25.0\%$. Patients with metabolic complications and ophthalmic complications had reported more impairment (though non-significant) (for metabolic complications 32.4% vs. 19.4%; $p=0.11$; for ophthalmic complications 30.9% vs. 21.1%; $p=0.10$). Overall impairment score of daily activities was $31.3 \pm 29.2\%$. Patients with metabolic complications and cardiovascular complications had reported more impairment (for metabolic complications 43.1% vs. 26.3%; $p<0.001$; and for cardiovascular complications 37.7% vs. 30.2%; $p=0.035$). **CONCLUSIONS:** DM is a disease that significantly impairs the opportunity to have a job, and also impairs the work productivity and daily activities of patients. This impairment is correlated with the presence of systemic complications. Thus, prevention or effective treatment of complications in DM is crucial to improve the social and economic consequences of the disease.

DIABETES/ENDOCRINE DISORDERS - Health Care Use & Policy Studies

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QUANTIFYING THE IMPACT OF POOR GLYCAEMIC CONTROL COMPARED WITH GUIDELINES IN THE TREATMENT OF TYPE 2 DIABETES IN UK CLINICAL PRACTICE

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OBJECTIVES: Cardiovascular disease is the major cause of death in patients with type 2 diabetes (T2DM) and long-term follow-up from UKPDS showed improved glycaemic control was associated with risk reduction for both myocardial infarction and death. The objective of this study was to quantify the expected difference in long-term outcomes associated with blood glucose treated to target compared with levels observed in clinical practice. **METHODS:** Data from UK primary care (THIN) were used to obtain the demographic and risk factor profiles of patients initiating monotherapy, dual therapy, and insulin-based therapy between 2005 and 2009. The Cardiff Type 2 Diabetes Model was initiated with cohort profiles consistent with those subjects initiating monotherapy, and HbA1c change over time was implemented under three scenarios: (1) HbA1c maintained at 6.5%; (2) therapy escalation occurring at a threshold of 7.5%, and (3) therapy escalation occurring at mean HbA1c levels observed in clinical practice. A 40-year time horizon using was used with UK £ 2011 costs; both costs and benefits were discounted at 3.5%. **RESULTS:** Data were available for 35,330 subjects; mean HbA1c (change) at therapy initiation for mono, dual, and insulin therapy was 8.0% (-0.93%, $p<0.001$), 8.5% (-1.1%, $p<0.001$), and 9.8% (-1.47%, $p<0.001$), respectively. Under scenario 1, total predicted costs (TC), life expectancy (LE), and quality-adjusted life-years (QALYs) were £7,200, 16.4 years, and 13.7 QALYs, respectively. For scenario 2, TC, LE, and QALYs were £14,416, 15.9 years, and 13.2 QALYs, respectively, whereas for scenario 3, TC increased to £14,914, while LE and QALYs decreased to 15.6 years and 12.8 QALYs, respectively. **CONCLUSIONS:** Failure to achieve glycaemic goals results in decreased life and quality adjusted life expectancy and excessive health care costs. Given current budgetary constraints, an ageing population, and increasing obesity, it is imperative that patients with T2DM are optimally managed in routine clinical practice.